EJMCR EJMCR EJMCR EJMCR EJMCR

Inguinoscrotal bladder hernia containing a vesical calculus: the diagnostic value of delayed CT

Salma Tabati[1*], Zaynab El Houssaini Iraqi[1,2], Ola Messouad[1,2], Laila Jroundi[1,2], Soukaina Allioui[1]

European Journal of Medical Case Reports
Volume 10(12):546–547
DOI: 10.24911/ejmcr.9-3202

OPEN ACCESS

This is an open access article distributed in accordance with the Creative Commons Attribution (CC BY 4.0) license: https://creativecommons.org/licenses/by/4.0/) which permits any use, Share — copy and redistribute the material in any medium or format, Adapt — remix, transform, and build upon the material for any purpose, as long as the authors and the original source are properly cited. © The Author(s) 2026

Keywords: Hernia, inguinal, urinary bladder, urinary bladder calculi, scrotum, tomography, X-ray computed, dysuria.

Type of Article: Image
Specialty: Urology
Correspondence to: Salma Tabati
*Department of Emergency Radiology, Ibn Sina University Hospital, Rabat, Morocco.
Email: salma.tabati1410@gmail.com
Full list of author information is available at the end of the article.

Received: 28 September 2026
Revised (1): 19 October 2026
Accepted: 25 October 2026

Background

Urinary bladder involvement occurs in a small proportion of inguinal hernias, whereas extension of the bladder into the scrotum is uncommon [1]. Large bladder hernias may present with lower urinary tract symptoms and two-stage micturition. The combination of a herniated bladder and a calculus within its scrotal component is particularly unusual [2,3].

Case Presentation

A 55-year-old man with no significant medical history presented to the urology clinic with dysuria and two-stage micturition. He reported intermittent scrotal swelling that decreased after voiding, consistent with Mery's sign. Physical examination showed painless scrotal enlargement without other associated clinical findings. Because a bladder-containing inguinal hernia was suspected, computed tomography (CT) was performed for diagnostic confirmation and anatomical assessment. Unenhanced CT demonstrated herniation of the urinary bladder through the inguinal canal into the scrotum. A hyperattenuating calculus measuring 27 × 22 mm was located within the scrotal component of the herniated bladder (Figure 1A,B). On delayed post-contrast images, excreted contrast material opacified the herniated bladder around the calculus and demonstrated continuity with the pelvic bladder, confirming the intravesical location of the stone (Figure 1C,D).

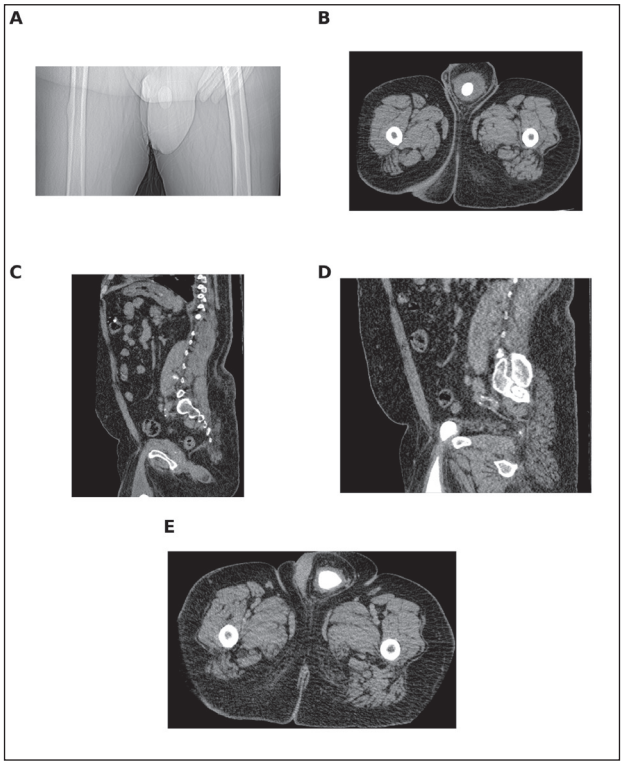


Figure 1. *Inguinoscrotal bladder hernia containing a vesical calculus. (A) Scout image showing an ovoid radiopaque calculus projected over the scrotal region. (B) Axial unenhanced CT image demonstrating a hyperattenuating 27 × 22 mm calculus within the scrotal component of the herniated urinary bladder. (C) Sagittal unenhanced CT reconstruction showing extension of the urinary bladder through the inguinal canal into the scrotum. (D) Sagittal delayed post-contrast CT image showing excreted contrast material within the herniated bladder, outlining the calculus. (E) Axial delayed post-contrast CT image confirming the intravesical location of the calculus within the scrotal component of the herniated bladder.*

Discussion

Two-stage micturition and a reduction in scrotal volume after voiding are important clinical clues to bladder involvement in an inguinoscrotal hernia. Urinary stasis within the dependent herniated bladder may contribute to infection and stone formation [2,3]. CT accurately defines the herniated bladder, depicts associated calculi and other complications, and is valuable before surgical repair

because unrecognized bladder involvement may increase the risk of iatrogenic injury [1]. In this patient, the delayed excretory phase was especially useful because contrast surrounding the calculus directly demonstrated its location within the herniated bladder lumen.

According to the treating urology team, subsequent management consisted of removal of the vesical calculus, reduction of the herniated portion of the urinary bladder to its anatomical position within the pelvis, and repair of the inguinal hernia with prosthetic mesh reinforcement. Information on the postoperative course and subsequent follow-up was not available to the authors.

Conclusion

In a patient with dysuria, two-stage micturition and scrotal swelling that changes after voiding, an inguinoscrotal bladder hernia should be considered. Delayed-phase CT can confirm bladder continuity and demonstrate uncommon complications such as a calculus within the scrotal bladder component.

List of Abbreviations

CT Computed tomography

Conflict of interest

The authors declare that they have no conflicts of interest regarding the publication of this article.

Funding

No external funding was received for this work.

Consent for publication

Written informed consent was obtained from the patient for publication of the clinical information and accompanying radiological images.

Author details

Salma Tabati[1], Zaynab El Houssaini Iraqi[1,2], Ola Messouad[1,2], Laila Jroundi[1,2], Soukaina Allioui[1]

1. Department of Emergency Radiology, Ibn Sina University Hospital, Rabat, Morocco
2. Department of Medecine, Mohammed V University in Rabat, Rabat, Morocco

References

1. Bisharat M, O'Donnell ME, Thompson T, MacKenzie N, Kirkpatrick D, Spence RAJ, et al. Complications of inguinoscrotal bladder hernias: a case series. Hernia 2009;13(1):81–4. https://doi.org/10.1007/s10029-008-0389-6
2. Inage K, Mizusawa H, Mimura Y, Shimizu F. Patient with inguinal hernia containing the urinary bladder complicated by bladder stones. IJU Case Rep. 2019;2(5):276–8. https://doi.org/10.1002/iju5.12100
3. Kutsal C, Baloglu İH, Çekmece AE, Ektiren M, Demir U. Bladder stones in a herniated bladder: a rare case report and literature review. Int J Surg Case Rep. 2022;93(C):106877. https://doi.org/10.1016/j.ijscr.2022.106877